QUARTERLY PUBLICATION OF CENTER FOR ECONOMIC ANALYSES

CEA
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DECENTRALIZATION OUR GOAL

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The Center for Economic Analyses (CEA) is a think tank of young economists who share a common vision for the Republic of Macedonia as a new emerging European economy integrated in the regional and worldwide market.

The Mission of CEA is to continuously research economic development and economic policy in the Republic of Macedonia and to offer recommendations, suggestions and measures.

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From the editor

Dear readers,

It is our pleasure and honor to represent a new bulletin to the Macedonian public. We, the members of CEA, want to contribute for quality debate on the topic of decentralization in the Republic of Macedonia and it is therefore why we named this bulletin: "Decentralization our goal"; because a message should be sent for the decentralization as our aimed goal. The edition frequency will be quarterly, and you have got the first number in front of you. We decided that the topic for this edition should be optimal size of the local self-government units. In this edition people from different countries with longlife experience are presenting their views.

Even the Antic Greek philosophers were facing questions about the size of the local self-government units. Plato says that the ideal town should be big enough to fulfill all the vital functions, and at the same time small enough to keep the unity of the town.

I would say that maybe, the question should be about acceptable size of the municipality, not the optimal size. It is difficult to give scientific answer with ready quantitative result about the optimal size of municipality. The issue is about adjustment and adaptability of the own experience with the experiences of other countries. That is why I believe that the debate should focus on the question for acceptable size of the local self-government units, in an already given political and economical conditions.

The process of evaluation for fragmentation and consolidation should be intellectual fight of arguments about: economies of scale, for the costs and appropriate quality of services, for plural and civil society, for "vote with their feet" concept, for participation of the citizens and voters in the municipality's work, for competition to attract private capital.

In this debate there is no space for any kind of political topics, it is transparently described in the messages from the authors of this bulletin.

We hope that this bulletin will capture your attention; we hope that through the motto "Decentralization- our goal" we will help stakeholders in Macedonia to overcome the narrow political judgments for this operation, and will contribute for new quality in the arguments about decentralization. We hope that the messages from the bulletin will reach the ears of politicians, in order to change their way of work and way of thinking.

I am kindly grateful for the courtesy from the authors of the articles and in sharing their experiences with us. We invite you to join us. Give us your suggestions and considerations.

Until next issue of Decentralization- our goal we remain.

Marjan Nikolov
President of the Assembly of CEA

CEA is expressing highest gratuade to USAID, World Learning, Bearing Point for the support so that this newsletter became real.



MORE SCIENTIFIC APPROACH AND LESS POLITICAL NEGOTIATIONS

Interview with **Prof. Andrej Tokarev, PhD (Architectonic Faculty Skopje)**

Professor Tokarev considers that there is a terminology problem. He says that after the Constitution of Republic of Macedonia the territory is non-dividable and not strandable, so here the term territorial division is inappropriate. The term territory should be replaced with its synonym-space, as a wider and more appropriate category.

Logically, the topic of the Law should come out like: "Law on space organization in Republic of Macedonia and setting out the regions of the local self-government units".

Its basic strategic document should be the space plan of the country, which by the rules of the nature, the ethnical princip should not be taken in consideration when establishing the local self-government units. The strategic document for the City of Skopje should be the general urbanistic plan.

Professor Tokarev considers that the criteria for announcing one space size of the local self-government, should be Gravier method, by which the size of the unit of the local self-government should be defined according to the time isohron for about half an hour. That is the access time from the center till the most distant inhabited place, by motor vehicle, one way, and represents teritory from about 300 to 400 km^2. If this criteria is taken in consideration in Macedonia's case, which has 25000 km^2 and population of 2.1 milion citizens and 80 citizens per km^2, then the optimal number of citizens in one unit should be round 30000. We can conclude that in Macedonia the number of local self-government units should be 60-80, says profesor Tokarev.

Another criteria is keeping a sustainable development in economic, social, ecological and security sence. In order to apply these criteria, a demographic capacity should be determined. Professor Tokarev says that population of 50 per a km^2 does not represent danger for protection of the enviroment. Population of 50 till 200 per km^2 endangers the enviroment, and over 200 per km^2 highly endangers enviroment.

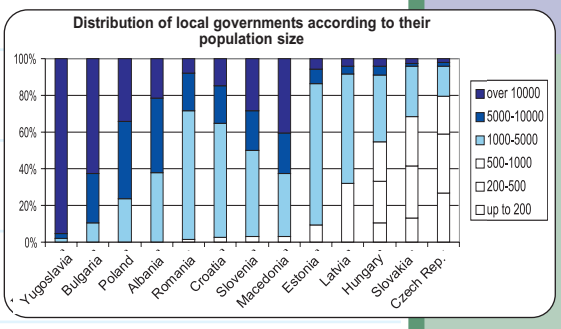
The professor's message for the readers is that it is not difficult to manage if you know how to. Less political negotiations, more experts and scientifical approach.

MACEDONIA WILL LEAD IN THE REGION

Interview with **Mr. Anthony Levitas from USAID's LGRP Macedonia**

I'm using this opportunity to welcome the edition of the first number of this newsletters and I wish for success for the members of CEA in its editing.

With a few notable exceptions, the return to local democracy in post-communist Europe has been accompanied by the creation of very small units of local government. This has had positive affects in terms of citizen engagement, but has made the efficient and effective work of local governments extremely difficult. Indeed, virtually all the countries that permitted or indeed encouraged small jurisdictions in the name of democracy in the early 1990s are now struggling in one way or another to consolidate them because it is exceedingly difficult to confer major service responsibilities to jurisdictions with less than 5 to 10 thousand inhabitants. In this, Macedonia's trajectory is similar to other countries in the region, and will in fact be ahead of many if the new Law on Territorial Organization is passed by parliament.



For illustration purposes Mr. Tony Levites presents the following Table. We can see that in Macedonia the largest percent of local self-government units have more than 10.000 inhabitants and between 1.000 and 5.000 inhabitants.

A LARGER NUMBER OF LSG'S IS REQUEIRED IN MACEDONIA

Interview with **Professor Markoski, PhD (Faculty of natural and mathematical sciences)**

Professor Blagoja Markoski says that misbalanced condition of the space organization has to be resolved by making larger number of communities and community centers for more efficient revitalization of the inhabited places in Macedonia. He has concluded, with the help of the economical concept, that most optimal for Macedonia is to have 144 communities. This concept contains criteria for service-supply needs, geographical criteria, traditional, infra-structural, politically regional and strategic criteria. Professor Markovski says that the solution for the revitalization of the economic and the demographic deteriorated areas is in greater labor force mobility. For example, Mariovo is rich in natural resources but poor in human resources thus, labor force from Prilep and Bitola can be engaged in that region.

ON THE SIZE OF MUNICIPALITIES

A comment from: **Mr. Olaf Merk (Dutch Ministry of Finance)**

There is a huge variety in local government size throughout different European countries. The largest municipal size can be found in United Kingdom with municipalities consisting of 140,000 inhabitants per municipality. France is at the other extreme, with an average of 1500 inhabitants per municipality. The EU applicant countries seem to have a somewhat smaller size than the EU member countries, both the variety is huge in both groups of countries, as can be seen from annex 1.

Bours (1993) grouped European municipalities into four groups: 1) large municipalities responsible for numerous functions (Scandinavia, Netherlands, UK); 2) average size municipalities with average scope of functions (Finland, Germany, Belgium); 3) small municipalities with an average scope of functions (France, Spain, Switzerland, Austria); 4) small municipalities with a narrow scope of functions (Italy, Portugal, Greece).

Macedonian municipalities are relatively large compared to the EU applicant states, as can be seen from annex 2. Only Lithuania, Bulgaria and Poland have larger municipalities. 41% of the municipalities have more than 10,000 inhabitants. In countries such as Hungary, Czech Republic and Slovakia this is the case in only 5% (or less) of the municipalities.

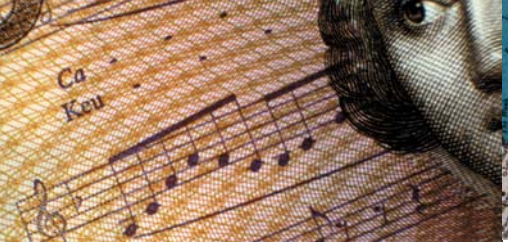
Average municipal size in EU and applicant countries

Country	Average municipal size
United Kingdom	140.000
Lithuania	66.000
Ireland	45.000
Bulgaria	35.000
Portugal	33.000
Sweden	30.000
Netherlands	29.000
Denmark	19.000
Belgium	17.000
Poland	16.000
Macedonia	16.000
Finland	11.500
Slovenia	10.300
Norway	9.000
Rumenia	7.500
Italy	7.100
Estonia	5.700
Germany	5.500
Spain	5.000
Letland	4.300
Hungary	3.300
Austria	3.300
Slovakia	1.900
Greece	1.800
Czech republic	1.700
Frankrijk	1.500

The central debate on municipal size is about the trade off between democracy and economies of scale. The smaller the municipality, the better the democratic process. But smallness could be inefficient when there are economies of scale.

The evidence on the economies of scale is mixed. Some authors find no increasing returns to scale, such as for example Derksen (1986) for the Dutch case. De Borger and Kerstens (2000) find that in Belgium 84% of the municipalities faces decreasing returns to scale and only 10% increasing returns to scale.

Both others see evidence of economies of scale. Conceicao Sampaio de Souza (1999) finds increasing returns to scale for Brasilian municipalities and Mau Pedersen (2001) finds different effects for different policy responsibilities in Denmark. Mau Pedersen finds the most promising results for administrative tasks, but when the average size reaches 18,000-25,000



inhabitants most of the economies of scale have been reached. For child care he finds increasing returns to scale till a size of 20,000 inhabitants. He finds increasing returns to scale for education and no conclusions could be drawn for elderly care.

Other possibilities to capture economies of scale are contracting out of municipal tasks, cooperation and assymmetric decentralization.

When tasks are contracted out, municipalities are still responsible for results but do not have to carry out all the tasks it self. They can remain small and contract out all the tasks that require more size. It could be problematic when municipalities do not possess the skills to negotiate contracts with contractors.

SIZE OF MUNICIPALITY (short review and empirical evidence from Slovenia)

A comments from: a**ssist. Prof. Zan Jan OPLOTNIK, Ph.D., assist. Bostjan Brezovnik, M.Sc. University of Maribor, Faculty of Economics and Business (EPF), Maribor, Slovenia University of Maribor, Faculty of Law, Maribor, Slovenia**

Slovenia is a small central European country with great demographic and geographic diversity, although comprise only a little bit more than 20.000 km^2.

It must be pointed out that in the reform the functional, financial and regional components were ignored due to various political interests. So, it came to extremes, such as: the establishment of large and very small municipalities, the establishment of "fictitious" municipalities from the previous overburdened municipalities, the centralization instead of regionalization, etc. The reason for this lies also in the lack of understanding of the principle of subsidiary.

Although by the law, 5.000 inhabitants represent a minimum for funding a municipality, currently 95 fail to fulfill this basic criteria. Many of them were politically enforced and created on the basis of a provision in the local government act that states that in exceptional cases a municipality may have fewer than 5.000 inhabitants for reasons of geography, border location, ethnicity, history or economics.

Results of econometrical analysis in continuation showed, that the most optimal are units, comprising around 5.000 inhabitants.

BIG IS STRONGER, BUT SMALLER IS LIKED

Is there a third way between small yet ineffective and big yet less democratic? Comparative conclusions and lessons learned - Courtesy from **Pawel Swianiewicz, PhD (University of Warsaw - Poland)**

Some arguments for larger local self-government:

1. Less depending on transfers from central government which makes them more flexible in making policy choices (for example Bulgaria, Poland and Slovak Republic),

2. Stronger economic base combined with low per unit operational costs for a service. On this way the base can be allocated for financing developmental projects (the data for Bulgaria, Poland and Slovak Republic clearly support this claim),

3. There is greater capacity to use credit resources in order to finance investment projects (the example with Slovak Republic shows terrifying level of debts for larger municipalities but on the other side

Decisions on change in number of municipalities

Country	Method of decision/limitations
Poland	Indecisive consultations, decision made by the central government, territory of the new municipality should "as far as possible homogenous, take into account social and cultural links and ensure capacity to provide public functions"
Bulgaria	Local referendum may block government decision, but cannot force central government to create/liquidate a municipality, new municipality should have above 6.000 citizens, central settlement unit; distances among villages should not exceed 40 km.
Slovakia	The domination of the right of every village to own local government, starting from 2002 new municipality cannot be smaller than 3.000 citizens, cannot have infrastructure facilities serving the whole territory of the municipality to be divided, cannot create an "urbanistic unit" with the "mother unit"
Hungary	The domination of the right of every village to own local government, recent threshold of 300 minimum population size, newly created local government has to demonstrate its capacity to provide obligatory tasks
Czech Republic	The domination of the right of every village to local government, recent threshold of 1.000 minimum population size

it confirms their credit credibility),

4. The more efficient dealing with technical infrastructure is another indirect effect (for example Bulgaria and Hungary).

Arguments for small local self-government:

1. Developing healthy and vital relationship between the citizens and local authorities,

2. Better informing of the citizens,

3. Higher turnout in local elections (confirmed empirical results for negative correlation between the elections respond and the size of the municipality),

The following table shows a number of decisions for changes in the number of local self-government units in some countries.

OPTIMAL SIZE OF MUNICIPALITIES IN MACEDONIA

Courtesy from: **James Wooster, PhD Economic advisor, Bearing Point**

What is the optimal size of municipalities in Macedonia? The response to this question is also a response to the unvoiced question of where to draw municipal boundary lines. From the perspective of public policy economics, both questions are, or should be, governed primarily by the "subsidiarity principle" -- sometimes termed the "local area benefit principle". In general, this principle states that government services should be provided by the lowest level of government that is capable of providing the good or service. Some services like national defense have a benefit area that must encompass the entire nation, while for others, such as park maintenance the benefit area may be very small indeed. The set of public goods and services enumerated in the law on territorial division have benefit areas well below that of the entire nation. To determine the optimal size and boundary location for Macedonia's municipalities it would be a worthwhile exercise to draw on a map the benefit areas for each of the public services and goods covered by the law. That exercise would reveal clusters of benefit areas. These clusters represent a first approximation the "natural" municipal boundaries and minimum municipal size.

A second consideration is economies of scale. By one calculation, the benefit area for kindergarten education might be quite small, perhaps no larger than the smallest village. However, it is likely to be most beneficial to provide kindergarten services within the context of an education administrative system which includes elementary and secondary education as well. For these levels of education the most efficient delivery size would necessarily include a great many small village size units; to prepare young people for successful participation in the modern world, elementary and secondary education requires a scale considerably greater than a small village. A second re-drawing of boundaries which attempts to take these practical scale economies into effect will reveal significantly larger clusters. This re-drawing should be inevitably (and quite correctly) be influenced by very practical mundane considerations including geographic features like the locations of mountains, rivers and lakes as well as the realities of the network of roads and telecommunications.

These simple cartographic exercises will reveal not only a finite number of major "clusters" but also a few apparent anomalies: Some services or goods have very small benefit areas and even after scale economies were taken into consideration, a number of them would fit well inside the major cluster areas -- the kindergarten example above and perhaps urban parks come immediately to mind. At the same time some other services or goods will encompass several of the major clusters. Both phenomena are common enough. In the former case it is normal enough for a municipal government to have responsibility for providing the service but to find formal and informal ways to integrate neighborhood associations or village councils into the decision making process. In the later case regional associations are typically established to deal with the issue. Regional urban transit areas and regional water areas are often formed to handle those special problems when they arise.

Thus far nothing has been said about numbers. Only guidelines have been offered and rough ones at that. Fortunately or unfortunately, these guidelines are main issue. In the end, the main reason for the existence of a municipality as an organic unit of government is the nature of the public goods and services that the municipalities are required to deliver. The benefit areas of those

1) Translation from Jovanka Oncevska, Bearing Point.



goods and services and the practicalities of scale economies constitute a kind of a "law of gravity" which should govern final decisions on where to draw municipal boundary lines. Having said that, experience seems to indicate that when municipalities have responsibility for the "normal range" of provision of local public goods and services, they have a difficult time doing a good job when their size falls significantly below about 20,000. At the other end of the spectrum urban metropolitan areas seem have a natural organic integrity of their own, and the size of the natural organic unit might be very large indeed. While there are risks to falling below some minimum size whereby it is difficult to provide quality services, there are also risks to breaking up a natural urban organic unit. Put another way, while there may be minimums in terms of optimal size, there do not appear to be maximums.

EMPIRICAL EVIDENCE ON THE OPTIMAL SIZE OF LOCAL GOVERNMENT JURISDICTIONS

Courtesy from: **Jamie Boex, Jorge Martinez-Vazquez and Andrei Timofeev International Studies Program, Andrew Young School of Policy Studies Georgia State University January 2004**

For policy purposes, concepts and theories are only of limited value if they are not able to link back to the reality in which government policies have to be formed. What concrete guidance does the theoretical framework provide for the policy discussion on the optimal size of jurisdictions and optimal local government structure?

It is a well known fact that scale economies are assigned an important role in the determination of an optimal structure of local government. In fact, a postwar series of local government boundary reforms across much of Europe was driven by the idea that government efficiency would be increased by the creation of large authorities. The efficiency was understood in a sense that the same level of public good is produced with lower costs. However, from empirical point of view it has proven difficult to define public services costs, as it is very difficult to account for qualitative aspects and externalities in public service provision. Nevertheless many countries undertook studies to determine the optimal size for local authorities by measuring only direct costs and assuming that the level of service provision is invariant. However most of these studies failed to produce a clear-cut answer on the optimal size of jurisdiction (Martins, 1995). The optimal size seems to differ by type of service and thus requires assigning weights do different functions of a multi-purpose government. The best that such studies could do was to help determine local authorities' minimum viable size threshold for a given basket of services. Depending on the functions of local government in a particular country, this threshold varies from 2,000 inhabitants in Bavaria to 5,000-6,000 inhabitants in Denmark to 6,000-7,000 in the Netherlands to 8,000 and 15,000 inhabitants of rural and urban areas respectively in the Saarland (Germany).

The empirical literature on the provision of local government goods is too extensive to be adequately summarized here. However, there seems to be a consensus among economists on a number of issues. The general conclusions of the literature appear to be that:

- Scale economies exist in the provision of local government goods and services, but the level of scale economies differs greatly for different kinds of locally provided goods, and the level of scale economies differs greatly in different settings. Typically it is possible to determine a minimum size threshold for a local government that is needed for a government unit to be able to produce a certain good or service efficiently.
- When several local jurisdictions are available, households display a tendency to sort themselves with regard to income and/or the demand for local government services. However, even with large numbers of competing jurisdictions available, large within-jurisdiction variations in income and preferences continue to exist.
- As the Tiebout hypothesis suggest, it appears that local government services (such as local public schools) feel some competitive pressure to provide services in an efficient manner. However, elections and "households voting with their feet" (by moving out of inefficient jurisdictions) are slow and

imperfect mechanisms, allowing considerable inefficiencies to occur at the local level, even when multiple alternative jurisdictions are available.

In summary, the main conclusion regarding the optimal size of jurisdictions and the optimal structure of local government should be that a single approach towards government structure would not fit all situations. While economic theoretical considerations can provide some guidance in framing the overall discussion, the optimal structure of local governments can vary from region to region and country to country, and will depend on the kinds of goods and services provided by local governments, the cost structure of the local government goods and services, the political and institutional environment, as well the demographic and geographical conditions.

Source reference: "Appendix 3.1: The Theory and Practice of Local Government Structure and the Optimal Size of Local Government Jurisdictions: An Application to the Russian Federation" in: Jorge Martinez-Vazquez, Andrey Timofeev, and Jamie Boex, Subnational Finance in the Russian Federation: Continuing Transition Toward a New Federalism. World Bank Institute Learning Resources Series, Washington D.C. (forthcoming).

The paper is available on line:
http://isp-aysps.gsu.edu/papers/

MUNICIPALITY SIZE IN THE ECONOMIES OF SCALE CONTEXT IN PROVIDING SERVICES AT LOCAL LEVEL; EMPIRICAL EVIDENCE FROM MACEDONIA

Marjan Nikolov, MSc economic analyst-CEA

The empirical results from many countries are revealing economies of scale in rendering service at local level. Of course, one of the main challenges during such a researches is providing quality data.

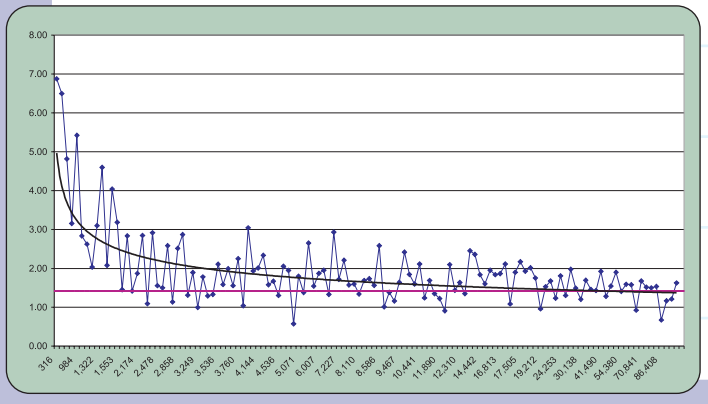
Here we will present analysis of the economies of scale of the administrative costs in the context of the LSG size in Macedonia.

The administrative costs composite index is calculated from three variables:

1. Number of employees in the LSG's administration per capita;
2. Salaries over total expenditures at the LSGs;
3. Total municipality budget expenditure in the LSG per capita.

This index will help in this microeconomic efficiency analysis. The inputs are the employees and their salaries in the municipalities' administration and the municipality administration budget. The output measure is the number of citizens served in the relevant municipality.

The administrative cost composite index for each of the 123 LSG in Macedonia is illustrated in the next figure.



From the figure we can see that by increasing the number of inhabitants in the LSG in Macedonia the administrative cost composite index is diminishing. The black line is a quadrate regression of the population behavior and the red line is the average composite index for Macedonia.

What the figure illustrates is the increasing economies of scale of up to 6000 inhabitants in the Macedonian municipalities (by doubling the inputs we get more than double citizens served). The increasing economies of scale are diminishing significantly from 316 up to 6000 inhabitants and latter we can say that there are constant economies of scale in serving citizens depending on the size of municipality.

From the figure one can see that the optimal minimal size of LSG in Macedonia is in around 6000 inhabitants if the criteria is the cost for municipality administration in rendering administrative services. This is close to the 5000 threshold in the Slovenian territorial model and the 6000 in the Bulgarian model.